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VANCOUVER EXPO 86

United States National Exhibition Office of the Commissioner General

The Honorable Charles Z. Wick Director United States Information Agency

Dear Mr. Wick:

I am pleased and honored to send you the final report on the participation of the United States of America at the 1986 World Exposition on Transportation and Communications, EXPO 86 in Vancouver, British Columbia.

The United States section, including the U.S. National Pavilion and the pavilions of Washington, Oregon and California, represented the largest non-Canadian presence at EXPO 86. In keeping with the theme of EXPO 86, the United States Exhibition dealt with the American space program, its past, present and future, emphasizing the social and economic benefits of space exploration.

One unique feature of EXPO 86 was a series of theme-related "specialized periods" which spanned the full period of the fair. Participation by American companies, institutions, government agencies and individuals in these specialized periods was very gratifying, and added significantly to our presence at the fair.

I would especially like to comment on the exceptionally high caliber of the USIA staff members who worked on the EXPO 86 project. Their professionalism, support and enthusiasm helped to make all of EXPO 86 a rewarding and gratifying experience for me.

I thank you, and the USIA, for the privilege and pleasure of serving as Commissioner General of Section for the United States at EXPO 86.

Sincerely,

Fred L. Hartley

Ambassador

Commissioner General of Section

Jus E. Hall

FINAL REPORT

United States Participation

The 1986 World Exposition

President Reagan's Dedication of the Pavilion

THE WHITE HOUSE
WASHINGTON

March 21, 1986

The people of the United States dedicate their Expo '86 Pavilion to the memory of the seven CHALLENGER astronauts and to the other brave Americans who have given their lives in the saga of space exploration. Their courage, their skill, and their willingness to assume great risk have taught the rest of us an invaluable lesson.

Our destiny lies beyond the bounds of Earth. Space, and the vastness of the universe, beckon us to a new frontier. We must not falter in our dreams of progress, or in our determination to meet the challenges of the future. To do so would be to betray the vision of those who dedicated their lives to a quest as old as humankind and as fresh as the spirit of discovery.

Today we pledge ourselves to continue this quest for the benefit of existing generations and for all those to come.

Rowald Resgon

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Introduction

EXPO 86, perhaps the last world's fair of this century in North America, was held in Vancouver, British Columbia, Canada, between May 2 and October 13, 1986.

By most reckonings, the fair, whose official title was the 1986 World Exposition on Transportation and Communications, was an outstanding success. In all, 51 nations — including the United States — participated, along with seven Canadian provinces, two Canadian territories, three U.S. states and seven major corporations. Attendance exceeded the most optimistic projections. An estimated 6.8 million persons made a total of 22 million visits to the fair, compared with 13.5 million visits projected by fair organizers before opening.

Besides the general public, EXPO 86 attracted government and business leaders from around the world, including such dignitaries as the Vice-President of the United States, the Prime Ministers of Great Britain and Canada, the Crown Princes and Princesses of Great Britain and Norway, the President of Italy and the board chairmen of General Motors and Chrysler.

Under the leadership of Ambassador Fred L. Hartley, U.S. Commissioner General, United States participation in EXPO 86 served our national objectives well. The extent and quality of the U.S. Pavilion, in combination with independently-organized and funded pavilions of California, Oregon and Washington, were seen by Canadian officials and public as valuable contributions to the success of what they regarded as an

important national undertaking, contributions which appropriately reciprocated Canadian participation in recent U.S. world's fairs. In addition to this important aim of U.S. participation as a whole, survey research showed that the U.S. Pavilion successfully demonstrated U.S. leadership in space exploration, its second major objective. Throughout the exposition, the U.S. Pavilion operated at more than 98 percent of its capacity of 14,000 visitors a day. Two and a half million persons — over a third of the total of visitors to Expo — passed through the U.S. Pavilion, including 15,000 dignitaries and special visitors. In addition, visits to the pavilions of California, Oregon and Washington totalled 7.5 million people.

The United States Information Agency, directed by Charles Z. Wick, was charged with overall responsibility for U.S. federal participation at EXPO 86. Funding included \$6.8 million appropriated by Congress, augmented by in-kind and cash contributions from the private sector totalling approximately half a million dollars. How these resources were organized and used in the broad context of EXPO 86 is the subject of this report. In the pages that follow are a history of the organization and development of U.S. participation, a description of the the U.S. Pavilion and its operations and of the subsidiary activities of the exposition in which the pavilion participated, an assessment of the impact of these operations and activities and an account of some of the lessons learned in this process.

Section 1

The 1986 World Exposition

Development of the Fair

EXPO 86, the 1986 World Exposition on Transportation and Communications in Vancouver, British Columbia, was approved as a Special Category world's fair by the Bureau of International Expositions (BIE). The BIE is a treaty organization vested with sanctioning authority for all international expositions by its member states. The United States joined the BIE in 1968.

A Special Category exposition must devote itself to a single branch of human endeavor. The host organizers of such an exposition must provide pavilions for the guest nations, which then lease the space from the organizers.

EXPO 86 used a modular system which could accommodate a variety of pavilion sizes, ranging from a one-module pavilion of 2,500 square feet to a 16-module pavilion of 50,000 square feet. The U.S. leased a pavilion of six modules, providing a total area over two levels of 25,000 square feet.

The Theme

EXPO 86 was registered with the BIE on November 26, 1980, as a Special Category fair with a transportation theme, looking at all aspects of the movement of people and goods. The fair ran for 165 days, from May 2 to October 13. However, early on in the planning, Expo organizers decided to expand the theme to include communications which, as the movement of information, is closely related to transportation. Expo's theme statement — World in Motion; World in Touch — reflected this dual focus on transportation and communications.

In the organizers' words, "transportation and communications are essential to satisfying our human needs and fulfilling our most fundamental nature. They are among the most ancient accomplishments of the human race, the means by which we have survived and prospered. They have allowed us to realize three important aspects of our human potential — as providers, as innovators and as visionaries.

"Children in developing countries, whose parents still work the land and reap the water's wealth by traditional means, are being vaulted into the modern age through education transmitted by communications satellites. On the evening television news, we are whisked around this world in motion, to be left with a vague sense of disquiet that such brief glimpses of other people, places and customs sometimes show more of what we do not know about our fellow human beings than what we do know.

"Complex and far-reaching systems of transportation and communications have given a new immediacy to motion. . . . We are collectively involved in the moment-by-moment operation of those systems; we are all travellers or senders and receivers of goods and



The theme of EXPO 86 was reflected at several plazas throughout the site.

information; we live and work and play using the technologies of transportation and communications; we celebrate our humanity through rituals of motion.

"Transportation and communications systems are the means by which we can establish and maintain contact with each other. They keep our world — its people, its goods and information — in motion and in touch. It is the human motive, with all its ingenuity and rich diversity, that gives the technological drawing-together of community a special dimension."

The Fair Site

EXPO 86 was located on a 130-acre site on the north shore of False Creek, with downtown Vancouver at its back to the north and the tidal waters of False Creek to the south. A second site comprising seven acres was located on Burrard Inlet, about 1.5 miles away from the main site, and housed the Canada Pavilion.

The main site was long and narrow, running about 9,000 feet along the shoreline of False Creek and varying from 200 to 1,200 feet wide. Capitalizing on the major attraction of the waterfront, the site featured a pedestrian boulevard which ran the length of the fair site and offered visitors easy access to spectacular water views from anywhere on the grounds.

This was the first international exhibition in North America in which China, the Soviet Union and the United States all participated, and the organizers used this to their best advantage. Since the pavilions of these three countries were expected to be major attractions at the fair, they were used to draw visitors to different areas of the fair, with China anchoring the east end of the ground, the Soviet Union in the middle and the United States at the west end. Movement through the fair site was eased by an efficient transportation system made up of a monorail, gondola car skyrides and a ferry fleet.

Participants

There were a total of 70 participants who had pavilions at EXPO 86: 51 countries, three American states, two Canadian territories, seven provinces and seven corporations.

The international participants were Antigua and Barbuda, Australia, Barbados, Belgium, Great Britain, Brunei, Canada, China, Costa Rica, Cote D'Ivoire, Cuba, Czechoslovakia, Dominica, the European Economic Community, France, Germany, Grenada, Hong Kong, Hungary, Indonesia, Italy, Japan, Kenya, Korea, Malaysia, Mexico, Montserrat, Norway, Pakistan, Papua-New Guinea, Peru, the Philippines, Romania, St. Kitts/

Nevis, St. Lucia, St. Vincent and the Grenadines, Saudi Arabia, Senegal, Singapore, the Solomon Islands, Spain, Sri Lanka, Switzerland, Tonga, Thailand, the United Nations, the USSR, Vanuatu, Yugoslavia and the United States.

The states, provinces and territories which participated were Washington, Oregon, California, British Columbia, Alberta, Saskatchewan, Ontario, Quebec, Nova Scotia, Prince Edward Island, the Yukon and the Northwest Territories.

Corporate participants were Air Canada, BCTV (a Vancouver television station), Canadian National (a state-owned rail company), Canadian Pacific (a privately held transportation conglomerate), General Motors, Telecom Canada and Via Rail (a Crown corporation responsible for passenger train service). In addition, there were three theme pavilions financed and staffed by Expo: the Expo Centre, the Roundhouse and the Ramses II exhibit; and an evangelical religious group sponsored the Pavilion of Promise.

Attendance

Originally, organizers projected an attendance for the fair of 16.5 million visits, expecting to draw between five and six million visitors from throughout the Pacific Coast area. However, following the problems at the 1984 New Orleans World's Fair and in the face of skepticism expressed in the Vancouver media, the organizers revised their projections downward, to 13.5 million visits.

In the end, even the original estimates were too low. Attendance for the fair exceeded 22 million visits by some 6.8 million visitors who, on average, each visited the fair site slightly over three times, making EXPO 86 the most successful Special Category world's fair ever held. In fact, thanks to an enormously successful program to sell season's passes, more than 12 million visits were sold before the gates were ever opened to the public.

More than 2.5 million of those 6.8 million visitors — more than one out of every three — went through the United States Pavilion.

Section 2

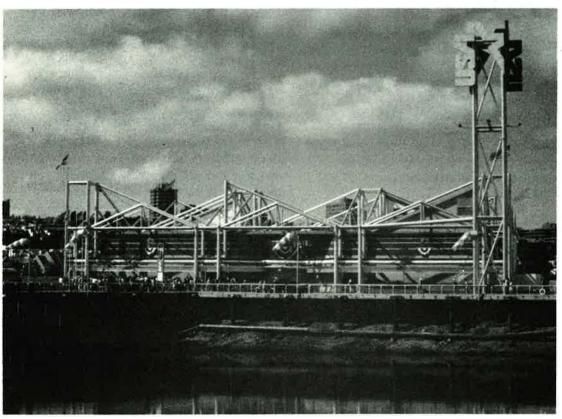
Early Development of U.S. Participation and Theme Selection

In light of Canada's cooperative spirit of participation in major expositions in the United States, the U.S. decision to participate in EXPO 86 was made early. Canada had mounted major pavilions at world's fairs in Seattle in 1962, San Antonio in 1968, Spokane in 1974, Knoxville in 1982 and New Orleans in 1984. On June 16, 1982, USIA Director Charles Z. Wick accepted in principle the Canadian invitation to take part in what at that time was to be called "Transpo 86", a name later changed to EXPO 86 in light of the growing scope of the exposition and the expansion of its theme to include communications.

The Director's acceptance was conditional on Congressional appropriation of funds for participation. U.S. participation at Vancouver received its first partial funding in FY 84. The Agency's appropriation for that year, PL 98-166, included \$6,509,000 for participation both at Expo 85 in Tsukuba and Vancouver EXPO 86. Of

this amount, \$720,000, was earmarked for Vancouver. In FY 85, PL 98-411 made an additional \$5,280,000 available. In FY 86, a further appropriation of \$850,000 was approved by Congress.

From the early stages of project development, the U.S. space program appeared to be a logical thematic centerpiece for the U.S. Pavilion. Given the fair's theme of transportation, travel in space, in which the U.S. was preeminent, appeared both an appropriate and expected focus of attention in U.S. presentations at the fair. Informal interagency consultations following the Director's acceptance of the Canadian invitation reinforced this idea. Decisive in Agency thinking was President Reagan's announcement in his January, 1984 State of the Union message that the United States would commit itself to the creation of a permanent manned space station within 10 years.



By early 1984, these ideas had been woven into a preliminary concept development paper circulated both within USIA and among other U.S. Government agencies including the Department of Transportation, the Department of Commerce, the U.S. Travel and Tourism Administration, the National Aeronautical and Space Administration (NASA) and the National Air and Space Museum in addition to the Department of State.

The paper proposed that the U.S. Pavilion treat the history, as well as the present and future of the U.S. space program. This approach was discussed at an interagency meeting on April 19, attended by representatives of the agencies noted above. It was further elaborated at a meeting April 27 between USIA officials and NASA department heads.

The result of these meetings was a final concept paper approved by USIA on May 30. According to this document, the U.S. Pavilion was to focus entirely on the U.S. space program and to illustrate continuing U.S. leadership in space exploration, show that these efforts fostered international cooperation and indicate that the private sector had a key role to play in deriving economic benefits for all through the exploitation of space.

Although the U.S. Pavilion itself would concentrate exclusively on the space program, the fair was structured to offer broad opportunities for the display of U.S. achievements in other areas of transportation and communication. Fair organizers had planned a series of 14 Specialized Periods. Each of these would focus on a particular aspect of the overall theme of the exposition for periods of 10 days to two weeks. Throughout the development phases of U.S. participation, USIA and contract personnel worked extensively on making opportunities for such participation widely known among U.S. public institutions and private companies and institutions involved in transportation and communications.

In addition, at this stage of development, pavilion space remained in the USA Plaza. This area, laid out by fair organizers in cooperation with USIA officials, was to be occupied by the U.S. national pavilion, U.S. states that participated, and possibly other entities. In all, the area covered 5.3 acres, with the potential to accommodate 22 pavilion modules offering 60,000 feet of covered space. Throughout 1984 and into the following year, other U.S. Government entities, including the USTTA, the National Park Service, the National Oceanographic and Atmospheric Administration, the U.S. Coast Guard and the U.S. Army Corps of Engineers expressed interest in occupying pavilion space in addition to the main U.S. national pavilion. However, budget constraints on these agencies eventually precluded such participation, although the U.S. Coast Guard was well represented in appropriate Specialized Periods.

Even in retrospect, it appears that the choice of the space theme was appropriate despite the problems posed for the U.S. Pavilion by the Challenger accident. This came at the time when actual exhibit installation had begun and when major changes in the U.S. Pavilion would have been impossible to implement effectively, had additional funds been made available. As the description of the actual content of the pavilion (Section 5) shows, relatively minor changes in the exhibition, combined with the President's dedication of the pavilion to the memory of the Challenger crew, helped put the tragedy in proper perspective for visitors. That the U.S. pavilion did in fact focus its presentation on the U.S. space program in spite of the Challenger disaster provoked no negative comment either in the media or from those who saw the exhibition.

However, a handful of visitors were critical of the narrow focus of the U.S. Pavilion. In letters to pavilion management, they expressed disappointment that the U.S. exhibition had not presented a much wider view of U.S. history, life and culture than the chosen theme permitted. Although such criticisms were clearly well-intentioned, they may have failed to recognize the practical difficulties of treating such broad topics meaningfully within the confines of a single pavilion. Nevertheless, this point deserves careful consideration in the formulation of future U.S. national exhibitions.

Section 3

Project Organization

USIA's organization of U.S. participation in EXPO 86 differed significantly from the approach taken at earlier fairs for which the Agency had responsibility.

First, reflecting the exceptional frequency of world's fairs during the decade of the 80's, existing Agency Expo personnel resources were already committed to the 1985 World Exposition in Tsukuba, Japan. By the the end of Summer 1984, Tsukuba development was in full swing and the bulk of Agency personnel resources would not become available to Vancouver until Fall 1985 at the earliest. Yet it was essential that provision for staffing Vancouver be made by Fall 1984 at the latest and that a fully operational staff be at work by mid-1985.

USIA Staffing

In light of these requirements, USIA management opted for a staffing strategy that relied heavily on private contractors for line operations with a small staff of Agency professionals to provide guidance and contract supervision.

During the preliminary phases of Vancouver development, management of the project had temporarily rested with Charles H. Clarke, Director of the Exhibits Service, assisted by a few Agency officers on short-term detail.

Permanent staffing began with the recruitment in August 1984 of Dale Morrison to serve as Project Director. Morrison, a career Foreign Service Officer, had little world's fair experience. He had, however, served briefly on detail to the Tsukuba staff and had a grasp of the elements of participation organization. Moreover, he had served as a member of the Agency's overseas inspections staff and as Chief of Program Evaluation in the Bureau of Programs and thus was expected to bring to the operation a sharp sense of Agency purposes and a critical approach to resource use.

The second permanent staff appointment came in early September with the assignment of Kathleen Kalb as Executive Officer. She had come to the Agency five years before under the Presidential Management Intern Program and had a thorough knowledge of the administrative procedures and practices of the Agency.

developed as Administrative Officer in the Office of Personnel. Her primary role was the development of carefully controlled budgets and oversight of all aspects of the project's contracting, personnel and financial operations.

From the Fall of 1984 through Spring, 1985, these two officers formed the core of the Vancouver staff. They were assisted for part of the period by two other officers on short term detail, FSOs Neil Donnelly and James McHale. In addition, they relied heavily for technical design advice on Clarke and on Paul Kervin of the Exhibits Service.

Other permanent members joined the small staff as the pace of project development quickened. Anita Grinvalds, a world's fair professional who had worked on the U.S. Pavilions at Knoxville and New Orleans, came aboard in May 1985. She assumed primary responsibility for oversight of audio-visual development and for oversight of participation promotion activities carried on by contractors.

James Ogul, a fair professional who had worked for the Department of Commerce at Knoxville and New Orleans and for USIA at Tsukuba, joined the staff in Vancouver in October 1985. Before the fair's opening, he provided direct oversight of pavilion construction and exhibit fabrication operations. After opening, he served as Pavilion Director.

The final member of the USIA team which operated the pavilion throughout the course of the fair in Vancouver was John Cannon, a Senior Foreign Service Officer. In April 1986, Cannon was completing a four-year tour as Branch Public Affairs Officer in Vancouver and was recruited to serve as Deputy Commissioner General for Public Affairs and Protocol to deal with the large volume of media inquiries, distinguished visitors and special events that are characteristic of world's fairs.

Other USIA staffers who worked on the project for part of the period included Diane Lewis, who helped obtain corporate contributions and provided administrative backup in Washington after staff operations moved to Vancouver, and Josephine Scarzella, who also provided administrative backup in Washington and special events coordination on brief assignments to Vancouver.

Throughout the project, Lorraine Flora served as project secretary in the Washington office.

Selection of a Commissioner General

Though professional staff have essential roles to play in U.S. participation at major international expositions, the ultimate responsibility for the achievement of U.S. diplomatic and foreign policy purposes rests with the Commissioner General of Section. It is this official who is recognized by international treaty as the final authority and arbiter of all aspects of a nation's participation. Equally important, the U.S. Commissioner General must be a person of sufficient stature to enlist the willing, high level support of both the public and private sectors.

U.S. participation at Vancouver was aided immeasurably by the selection of Fred L. Hartley as U.S. Commissioner General. Ambassador Hartley, for more than two decades the President and Board Chairman of Union Oil (later Unocal) Corporation, was approached for the position by Director Wick in December 1984.

Beyond his qualifications as one of the United States' outstanding industrial leaders, Ambassador Hartley had been born and raised in Vancouver and was a graduate of the University of British Columbia. Long a naturalized American citizen, he was ideally suited to represent the United States in a major Canadian undertaking.

Ambassador Hartley was sworn in as an

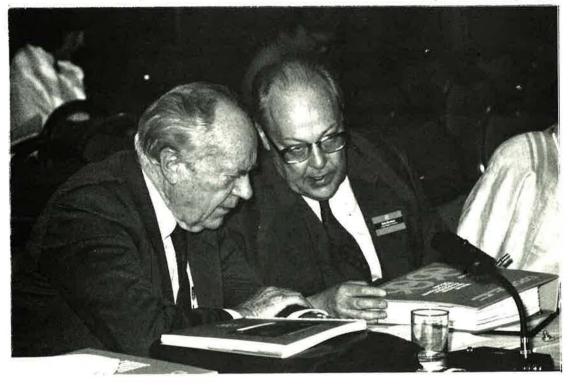
Agency expert on January 25, 1985 and confirmed in his rank as Ambassador by the U.S. Senate on December 16, 1985. Throughout the development of the project, he remained in close contact with the professional staff, offering advice and assistance. As discussed in detail below, he was instrumental in assuring the participation of California as part of overall U.S. participation at EXPO 86. During the course of the fair, he made frequent visits to Vancouver to fulfill major representational responsibilities.

Participation of the States

Believing that a strong American presence was important to the fair's success, Expo officials invited a number of states to participate and set aside the USA Plaza area for the national and state pavilions. Although the Pacific Rim states of Alaska, Hawaii, Washington, Oregon and California all originally expressed interest, Alaska and Hawaii eventually declined because of budget constraints.

In May, 1984, Washington and Oregon officially accepted Expo's invitation, but California, while still interested, indicated that it could not make a decision until later in the year. As with Alaska and Hawaii, budget concerns were the major reason for California's hesitation.

Since they hoped a large portion of the fair's attendance would come from the western United States, California's reluctance was of major concern to Expo



Ambassador Hartley and Project
Director Dale Morrison, at a
meeting of the College of
Commissioners General for
EXPO 86. The meeting, involving
representatives of all participants
and Expo officials, was one of
several held before the world's fair
opened to discuss progress in the
planning and organization of
the event.

officials who quickly launched a major lobbying effort aimed at securing the state's participation. Officials of the U.S. Pavilion were asked to help in those efforts and the Project Director met on several occasions with state government officials and business leaders to discuss the benefits of participation.

From those meetings, it became apparent that both industry and government were reluctant to commit resources to a world's fair in Vancouver, given the poor record of recent world's fairs in the United States. State officials indicated that, although the government was in favor of participating, substantial private sector commitments were required before state funding would be provided.

Early in 1985, Ambassador Hartley helped to arrange a series of meetings involving senior Expo officials and the Governor, legislative leaders and key members of the California business community. Shortly after those meetings, in mid-April, a bill was introduced in the California Senate seeking \$2 million to fund state participation in Expo. When the Policy Committee of the State Assembly approved the \$2 million appropriation on April 29, it seemed that the question of California's participation had at last been settled. However, in May, the Assembly's Ways and Means Committee reduced the appropriation to \$1 million and made it contingent on matching support from the private sector.

Although there were some anxious moments, the bill — with the \$1 million appropriation — cleared the Assembly at the end of May. In the State Senate, the bill was approved and the appropriation increased to \$1.5 million, although it was still contingent on matching support from the private sector,

State officials attempted to obtain the required private support to ensure California's participation but, when business contributions weren't forthcoming, Ambassador Hartley decided to take a leading role in the fundraising effort. During the next several months, he made presentations to a number of California business leaders and arranged for the chief executive officers of a dozen leading corporations to visit Vancouver and the Expo site.

California Governor George Deukmejian had originally said that the private sector support had to be in place by November 22, 1985, but, at the urging of Ambassador Hartley, he extended that deadline to November 29. Thanks largely to the efforts of Ambassador Hartley, sufficient private sector support had been promised by November 27, and the state's participation was finally assured.

Together, the U.S. national pavilion and three



Ambassador Hartley signs the Participation Agreement on behalf of the United States government, officially taking possession of the pavilion. Expo Commissioner General Patrick Reid looks on.

state pavilions formed the USA Plaza, the largest non-Canadian presence at the fair. The centerpiece of the Plaza was the Courtyard of the States, a landscaped area set aside for special displays and entertainment. It contained an open-air stage where bands, singers. dancers and gymnasts performed, drawing visitors to the Plaza area and the west end of the Expo site. Performers came mainly from the participating states of Washington, Oregon and California, although groups from other U.S. states also appeared. Nearly 500 different groups performed at the Courtyard during the fair, providing almost continuous entertainment for visitors to the four American pavilions. Construction costs for the Courtyard were shared by the federal and the three state pavilions. and its operation was handled by a committee with representatives from each of the four pavilions. As in the development of the courtyard, cooperation between the U.S. and the states' pavilions was close and productive throughout the exposition.

Leadership of the states' pavilions was provided by Commissioner Sen. Barney Goltz and Deputy Commissioners Evelyn Sun and Roger Wilson of Washington, Commissioner Robert Stevens and Deputy Commissioner Wayne Rawlins, Oregon, and Commissioner John Hay and Deputy Commissioners Allen Goldstein and Larry Hoffart, California.

Selection of the Designer

Once the theme of the pavilion had been determined, the next step was to select a designer. In May 1984, USIA announced its intention to solicit proposals for a creative contract for the pavilion and requested samples of previous work. An inter-agency panel evaluated the portfolios of 45 firms that had expressed interest in

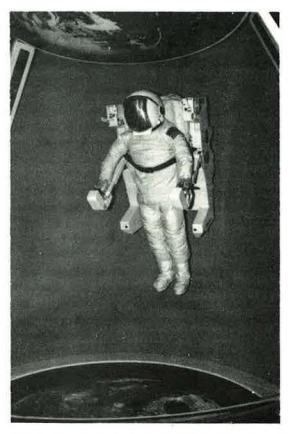
A life-sized model of the Manned Maneuvering Unit, suspended between heaven and earth, kept watch over the pavilion. bidding on the project. In August, 10 design firms were selected to bid on the creative contract. This included exhibit design, research, scripting, audio-visual and film presentations for the pavilion, as well as exterior treatment and landscape design for the entire USA Plaza.

Bids were received on October 22 and a panel composed of personnel from the National Air and Space Museum, NASA, the General Services Administration and USIA met to review the technical characteristcs of the submissions. Based on these evaluations and on the prices proposed by the bidders, two firms were determined to be in the competitive range — Robert P. Gersin and Associates and Toshihiko Sakow Associates. Representatives of both firms were invited to discuss their proposals in detail and were requested to submit a best and final offer.

Toshihiko Sakow Associates (TSA), with the highest combined score of both technical and price factors, was awarded the contract on December 7. TSA had a long-standing association with NASA, as well as a thorough understanding of the space program and the proposed space station. In fact, the firm was in the process of designing a space station exhibit for the 1985 Paris Air Show, as well as an exhibit on the same subject for the Chicago Museum of Science and Industry. Thus, the firm was particularly well-positioned to provide the technical accuracy and verisimilitude wanted for the pavilion.

In its role as designer for the U.S. Pavilion, TSA was responsible for the architectural, electrical and mechanical design, the exhibit design, audio-visual development and production, research, guide scripts, graphics, copy, guide uniform design, artwork for collateral products and architectural master planning. In addition, TSA devised the exterior treatment for the federal pavilion and for the pavilions of the participating states, as well as the landscaping of common areas and the design of the performance area within the USA Plaza.

Because of the wide-ranging nature of the creative contract, TSA made use of several sub-contractors. The firm of Christopher Chapman Ltd. produced the film and the audio-visual presentations for the pavilion. Chapman is well-known in the film industry for the technique of multi-dimensional imaging, which he invented and used in the award-winning film he produced for the Ontario Pavilion at Expo 67. David Anderton, who has written many books and articles on the space program, was the researcher and writer for the project. Also included on the design team were Tamm/Tacy and Associates Ltd.; William O. Karjala Associates; Wild/Hess AIA Architects; Andrew C. Lawn; Presentation



Planning Inc.; Design & Production; Boston Light & Sound; Hisata Design Associates; and Philips Barratt Engineers and Architects.

Selection of the General Services Contractor

Since the line staff of the U.S. Pavilion would be private contractors, defining their roles and awarding an umbrella general services contract were among the first tasks of the project director.

The General Services Contractor (GSC) was to arrange for, supervise and monitor all capital construction, exhibit fabrication, installation and maintenance, custodial service and striking. The GSC was also to provide logistic and administrative support, to arrange staff housing and transportation service, and to recruit, supervise and administer the payroll for all guide, lounge and security staff. In addition, the GSC was responsible for public affairs support, participation promotion and protocol activities.

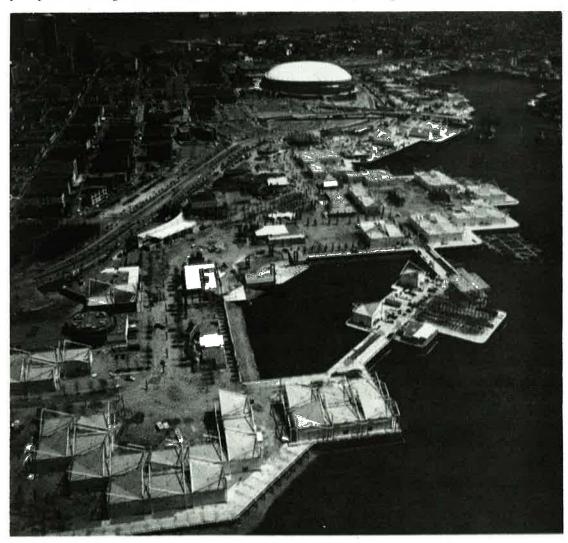
When the solicitation for the General Services Contract was completed, it was apparent that no one company could provide all of the defined services. Instead, what was needed was a consortium of companies which could work together as a team.

A request for proposal was sent to 35 companies in December 1984, and seven bids were received in January 1985. Three of those initial seven bidders were in the competitive range of submissions whose combined technical and price proposals deserved further consideration. After best and final offers were reviewed, an association of U.S. and Canadian firms headed by the construction management firm of Davson, Prichard & Downward Ltd. (DPD), which had the highest combined technical and price scores in the competition, was awarded the contract.

Shortly after the award of the General Services Contract, two unsuccessful bidders protested to the General Accounting Office. Both protestors alleged that DPD did not meet the "definitive responsibility criteria" because the firm had no prior world's fair experience. USIA successfully argued that such experience was not a prerequisite for bidding on the contract, that the

association of firms headed by DPD did indeed have more than adequate experience to perform the functions outlined in the solicitation and that overall management of the project would be the responsibility of the USIA staff. DPD continued work under the contract, despite the protest, and in August the GAO rejected the protests in their entirety.

Included in the GSC team were Berger & Associates Canada Inc. (public affairs and protocol); Daniel J. Edelman Inc. (participation promotion); Drake International Inc. (staffing services); Uniguard (security); Frank P. Dow Co. and Davidson & Sons Customs House Brokers Ltd. (logistics); Scandinavian Building Maintenance (custodial service); MacDonald Realty (housing); Hagen's Travel Service Ltd. (travel and transportation services); and Davson, Prichard & Downward Ltd. (construction, fabrication, installation, maintenance, striking and administration).



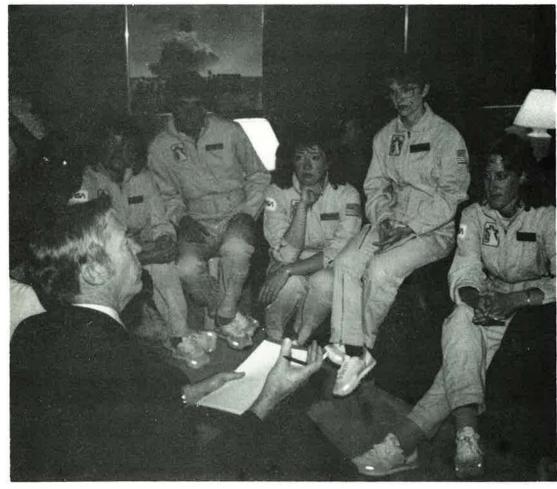
The Expo site begins to take shape. The United States Pavilion is the rectangular structure in the lower center of the picture.

Selection of the Guides

Almost from the beginning of the project, the pavilion guides were an integral part of the U.S. Pavilion. USIA personnel felt that having bright young Americans explaining the displays and interacting with the visitors would enliven the exhibit and counterbalance its technical hardware, thus driving home the theme of the human element in the space program. America has a deep respect for the individual, preserves a diversity of ethnic cultures and fosters the exchange of ideas. The guides helped convey these values to the people visiting the U.S. Pavilion. As the country's representatives to the world, the guides were vitally important to the success of the pavilion.

Under the terms of the General Services Contract, the pavilion's guides were recruited, hired, employed and supervised throughout the fair by Drake International. The guides had to be American citizens, over 21 years of age, with some post-secondary education and an interest in the American space program. Ability to speak a second language was also an asset. In addition, since the success of the pavilion depended on the presentation abilities of the guides, they had to have outgoing personalities and enjoy putting on a performance.

Interest in the guide positions was high. From the time U.S. participation in the fair was announced, USIA headquarters in Washington received a steady stream of letters from people wishing to work as guides in Vancouver. Further recruitment was done through advertisements in daily newspapers in Vancouver (for resident American citizens) and in several American cities. In all, more than 500 applicants were considered for the 38 guide positions available. The best of these were interviewed in Drake offices throughout the States and the company recommended who should be hired. Those candidates were then interviewed by the pavilion's Executive Officer, and all subsequently received job offers. The guide corps included representatives from all parts of the Union — California, Oregon, Washington, New York, Florida, Tennessee, Texas, Virginia, Minnesota, Maine, Montana, Idaho, Colorado and Hawaii.



For many guides, one of the major benefits of working in the United States pavilion was the opportunity to meet some American astronauts and talk to them about travel in space. Here, Apollo 14 astronaut Stuart Roosa talks to a group of guides in the pavilion lounge.

Section 4

Project Development

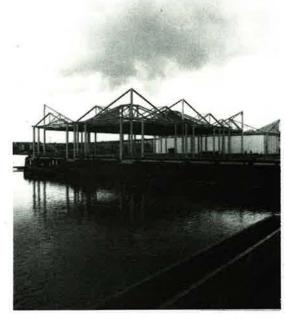
Design Operations

As indicated elsewhere in this report (Section 2), the decision was made at an early stage that the pavilion would focus on the American space program, with special attention paid to the planned space station. Once the design contract was awarded, the challenge became to translate that theme into an exhibition which would make a visit to the U.S. Pavilion a meaningful and dramatic experience.

A concept paper had been put together by the design firm — Toshihiko Sakow Associates, Inc. — and, during late 1984 and early 1985, a series of meetings was held to determine what models, displays and exhibits were required for the pavilion. Once that was decided, TSA developed the design specifications for the exhibitry, which was then assembled by subcontractors. For the model drawings, TSA worked closely with NASA to ensure that the pavilion would accurately reflect the current plans of the space agency.

After the pavilion content was decided on, museums and other educational institutions were given the opportunity to assume responsibility for construction of the models. The institutions would then own the models and lease them to the pavilion for the duration of the fair. The Space Hall of Fame in Alamagordo, New Mexico, opted for this plan and took over the construction of the main model of the Space Station exterior. This model was shipped to the museum when the fair was over.

Since Expo was only providing four walls and a floor, the design firm was also responsible for developing complete architectural drawings for the pavilion. These had to be approved at various stages in their development by Expo's Project Approval and Control Office (PACO) to ensure that pavilions met provincial building code, fire regulation and local bylaw requirements. At each stage, PACO reviewed the drawings and, where they conflicted with local requirements, suggested changes needed to make the design conform. In retrospect, having one central authority to approve plans and issue building permits greatly facilitated the design and construction process, although at times PACO seemed inflexible and its decisions somewhat arbitrary.



The future United States Pavilion.

When the drawings were completed and approved, they were forwarded to the General Services Contractor who prepared bid packages for the work to be done which were put out to tender. The subcontracts were awarded and construction got underway.

Construction

In October 1985, the shell of the building that would eventually become the U.S. Pavilion was officially handed over to representatives of the United States Information Agency by EXPO 86, and the intensive effort to turn it into an exhibit area got underway. The shell consisted of four walls and a roof over a floor area of 17,000 square feet, about 80 percent of which was made up of a concrete deck on pilings over the waters of False Creek.

One of the first orders of business was to hang a large banner identifying it as the United States Pavilion and to erect a four-sided signage tower to carry the starshaped pavilion logo. The tower was illuminated and quickly became a familiar landmark on the west end of the Expo site, easily visible from several of the bridges leading into downtown Vancouver.

Construction began on October 7 and was



Patrick Reid hands over responsibility for the pavilion to Ambassador Hartley.

essentially complete by early March, when work began on the installation of exhibitry and in the theater. The models used in the pavilion were built by United Scale Models of Houston, Texas, while Rathe Productions of New York was responsible for the rest of the exhibitry and for the exhibit lighting. Boston Light and Sound looked after the theater facilities. The pavilion was completed by April 21, more than a week before the opening of the fair.

Throughout the construction and exhibit installation phases, changes were made in the original design specifications in order to save costs, particularly in the non-exhibit areas of the pavilion. For example, the ceramic floor tiles in the washroom areas called for in the original specifications were replaced by linoleum floors. In all, more than 100 change-orders were issued and the savings realized through these changes were used to upgrade the exhibit areas, without having a negative impact on the overall pavilion budget. USIA staff member James Ogul worked closely with the contract construction personnel to develop these. Savings realized in this way amounted to nearly \$120,000.

A Walkthrough of the Completed Pavilion

The pavilion was designed as a 30-minute tour of the past, present and, with special emphasis, the future of the United States space program. The visitors' journey through nearly 40 years of space exploration was enhanced by the guides, who made presentations relating to the exhibitry at 13 different points in the pavilion. Written scripts were provided for each position, but the guides were given the flexibility to let their presentations evolve so that they could respond to the needs of their ever-changing audiences. The result was that all visitors received the same basic information, but the guides' presentations were never the same.

The pavilion experience actually began in front of the pavilion. Two guides limited access to the skywalks outside the pavilion entrance to 200 people, but jugglers, musicians and other street entertainers amused the crowds waiting in line to go into the pavilion. There was often a 30 to 60 minute wait to get into the pavilion, so the Expo-provided street entertainers were greatly appreciated by those in the line-ups.

Visitors entered the pavilion on the mezzanine level from an external skywalk, where the theme was introduced by a quotation from scientist Dr. Robert H. Goddard inscribed on the entrance way:

"There can be no thought of finishing, for aiming at the stars, both literally and figuratively, is a problem to occupy generations, so that no matter how much progress one makes, there is always the thrill of just beginning."

Immediately inside the pavilion was the so-called History Catwalk, where the visitors were greeted by a life-sized model of a Manned Maneuvering Unit (MMU), suggesting an astronaut working in space, somewhere between the Earth and the Moon. On the walls were pictures of key moments in the space program — Alan Shepard, the first American in space; John Glenn, the first American to orbit the earth; Neil Armstrong, the first man to walk on the Moon; and so on.

The 10 men and women who lost their lives in the two major accidents that have occurred during the history of the U.S. space program were remembered in plaques bearing their names, and the message of the President dedicating the pavilion to their memory answered the question of whether the challenge of space

exploration is worth the risk:

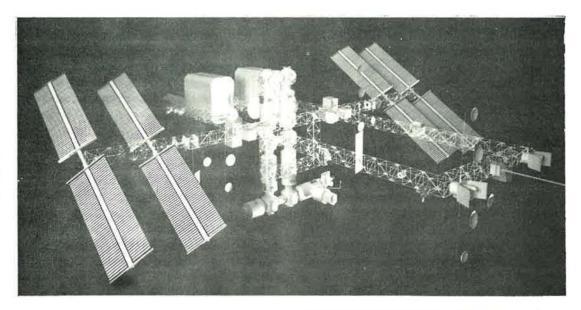
"Our destiny lies beyond the bounds of Earth. Space and the vastness of the universe beckon us to a new frontier. We must not falter in our dreams of progress, or in our determination to meet the challenges of the future. To do so would be to betray the vision of those who dedicated their lives to a quest as old as humankind, and as fresh as the spirit of discovery."

The Challenger accident was fresh in most people's minds, and many pavilion visitors were visibly moved by the message. It was one of the most photographed exhibits in the pavilion.

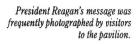
The next part of the History Catwalk showed the evolution of the American space program through scale models of the various spacecraft developed for it. Included were the Mercury, Gemini and Apollo spacecraft which carried man into space and to the Moon, as well as the Pioneer, Voyager and Viking, the robot explorers of distant planets. From a platform among the models of the manned spacecraft, a guide wearing a NASA-style jumpsuit provided visitors with information about the history of the space program, and the role these vehicles played in it.

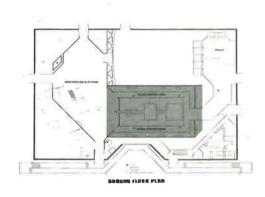


A crowd waits for the next "pulse" on the skywalk outside the pavilion.



Centerpiece of the pavilion was this large scale model of the Space Station which the United States plans to place in orbit during the next decade.

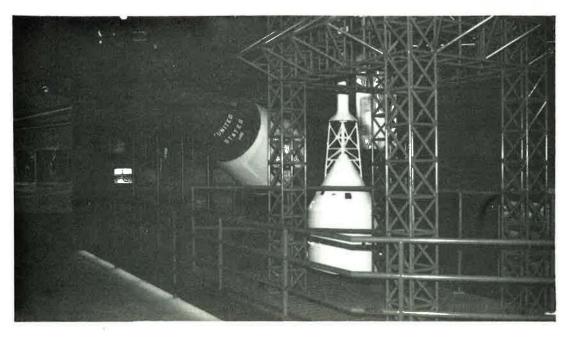








Guide platform for the so-called History Catwalk. In the background are models of some of the manned spacecraft used in the U.S. space program.



From this look at the past, the visitors proceeded to the present — the Shuttle Marshalling Area outside the theater. As the name suggests, the focus of this area was the Space Shuttle, and it featured a large model of a Shuttle craft. Banks of television monitors on one wall featured rarely seen NASA film footage of the activities before, during and after a Shuttle launch, while large display areas on the other wall provided information about the Shuttle and the cargoes it carries. The guides' presentation provided visitors with the Shuttle's vital statistics and described its capabilities to launch, retrieve and repair satellites. The guides also talked about the Hubble Space Telescope, which is scheduled to be put into orbit within the next few years and will probe 14 billion light years into the future.

Visitors then moved down into the theater on the ground level of the pavilion for a six-minute flight aboard the Shuttle to the future when the planned Space Station will be operational. Dominating the theater was a large screen and, as the visitors entered the theater, the center of the screen contained a motion picture image of the Shuttle just prior to launch. The voice of a NASA official at Mission Control provided a countdown.

As the countdown continued, the sound of the booster rockets increased in volume until the entire theater reverberated with their roar as the Shuttle was launched. Using film footage provided by NASA and using multi-dimensional imaging, the first two-thirds of the film provided a rare glimpse of life aboard a spacecraft, while the remaining third simulated the Shuttle's approach to and docking with the Space Station. The film included

footage showing an astronaut wearing an MMU moving against a backdrop of the Earth through space, the launch of a communications satellite and spectacular views of the Earth from space. An original musical score by Mickey Mar Productions added to the film's dramatic impact.

When the film concluded, the doors under the screen opened and the visitors moved into the Diorama area. Dramatic lighting focused attention on the centerpiece of the pavilion, a one-fifteenth scale model of the Space Station, complete with a docked Shuttle and astronauts wearing MMUs working on the Station's exterior. A one-minute computerized simulation of how the Station will be built was shown on several television monitors located around the area, and a guide provided further information about the Space Station and how it will be used for commercial manufacturing and for scientific research.

Across from the Space Station, two entrances led into a pair of identical modules, life-scale mock-ups of possible living and working quarters aboard the station. After setting the scene, a second guide directed the visitors through the entrances into the modules to find out what conditions would be like for workers in space.

The first part of the both modules was a working area, filled with computer keyboards and experimental and processing apparatus. Computer monitors provided data on the progress of some of the experimental packages. The second part of the modules was the living area. This contained sleeping quarters, an exercise area, a space kitchen complete with NASA-supplied food and a personal hygiene unit. Guides in both



The important role of exercise in the lives of astronauts was explained in the mock-up of possible living quarters in the Space Station.



Life-scale mock-up of the possible work area aboard the Space Station.



Pavilion guide Mary-Jo Baniecki, in the Shuttle Marshalling Area outside the theater. Beside her is a one-fifteenth scale model of the Space Shuttle Columbia.



A dazzling crystal sculpture reminded visitors that the growing of near-perfect crystalline materials for computers and other high-tech purposes is possible in space.

modules provided the visitors with information about this part of the exhibit and answered questions.

Containing symbolic representations of some of the products of space research and manufacturing, the final area of the pavilion was designed to show the scientific and commercial benefits of the Space Station. A large crystal sculpture served as a reminder that the growing of near-perfect organic and inorganic crystalline materials will be one of the Station's more important uses. Other displays dealt with potential for discovery in space: new drugs for fighting cancer and other diseases. new materials to improve everything from razor blades to jet turbines, new knowledge of fundamental physical and chemical processes, new insights into bioengineering. Once again, a guide explained the exhibitry to the visitors, and directed them to the passport machine outside the pavilion. (Souvenir Expo passports were sold by the fair organizers. All pavilions had a system set up whereby visitors could stamp their passport books with an impression of the pavilion logo. These passport stamps were eagerly collected by many visitors, as a souvenir of the pavilions they had visited during the fair.)

The tour through the pavilion took about 30 minutes, although visitors could remain behind in any area to examine the exhibits in more detail or to get more information from the guides about the space program. Many pavilion visitors took advantage of this opportunity to explore aspects of the space program in greater detail.

Section 5

Pavilion Operations During the Fair

Pavilion Staffing

The guides began arriving in Vancouver in mid-April, and two weeks of intensive training got underway on April 14, two full weeks before the opening of the fair. The guides were given a training manual which included a description of the pavilion, its theme and its operations; an outline of the responsibilities at each guide position; and general information about EXPO 86 and the City of Vancouver. The training schedule also included presentations by senior staff on various aspects of the pavilion, ranging from security to public affairs and protocol. The pavilion construction was essentially complete by this time, so training sessions could be held at the site. This was of great value, since it meant the guides could become totally familiar with the pavilion and its exhibits. In addition, dress rehearsals were conducted throughout the training period, so the guides felt comfortable at each position when the fair opened on May 2.

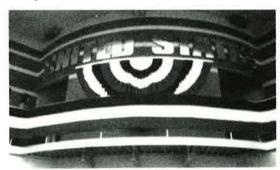
All guides were issued light blue NASA-style jumpsuits, dark blue blazers bearing the U.S. Pavilion logo and dark grey slacks or skirts. The jumpsuits were worn at all but one of the guide positions inside the pavilion; the blazers were worn at the three positions in front and in the final area of the pavilion.

All pavilions at the fair were open from 10 a.m. to 10 p.m., except during the last five days when the crush of people attending the fair was so great that Expo asked participants to open their pavilions at 8:30 a.m. Guides worked either a morning or an afternoon shift of 6.5 hours and, to maintain the freshness of their presentations, staffed two different positions during their shifts.

Because the subject matter of the U.S. Pavilion was relatively complex and visitors were likely to ask questions about it, the guides were also given extensive information about the space program, the planned space station, and manufacturing in space. Many of the guide positions were equipped with two-way radios and, when guides were stumped by a question, they were encouraged to use their radios to find out whether any administrator or other staff member knew the answer. A list was compiled of questions that no one could answer,

and these were forwarded to NASA on a regular basis. NASA usually responded within a week, and the answers were passed along to the guides. By the end of the fair, there were few questions asked about the space program that the guides couldn't answer.

At various times during the summer, the NASA-provided information was supplemented by visits to the pavilion of Canadian and American astronauts,



For the July 4 celebration, the pavilion was decorated with red, white and blue bunting, giving it a festive air.

several of whom agreed to take time to talk to the guides and other pavilion staff. These sessions were always eagerly attended, and the information gained from them put to good use by the guides in the presentations to pavilion visitors. Astronauts who visited the pavilion included Stewart Roosa, James Irwin, Deke Slayton and Kathryn Sullivan of the United States; Marc Garneau, Robert Thirsk and Bjarne Trygvasson of Canada; Pratiwi Sudarmono of Indonesia; and Prince Sultan bin Salom of Saudi Arabia.

Throughout the fair, the United States Pavilion guides consistently received high praise from visitors. They were a friendly and enthusiastic group, proud of the opportunity to represent their country to the many people from around the world who visited the pavilion. In the cold and rain that plagued the first two months of the fair and during the heat of the summer, they greeted thousands of people each day cheerfully, doing their utmost to make each person's visit memorable.

Administration

Three senior USIA staff members assigned to the project were designated as Duty Officers, so that a representative of the American government would be in the pavilion at all times during open hours. The Duty Officers were responsible for the pavilion's operations and, in the absence of the Commissioner General and the Deputy Commissioners General, greeted and entertained important visitors to the pavilion.

Each Duty Officer headed a team which also included a Deputy Duty Officer, a Protocol Officer and a Protocol Assistant. The Deputy Duty Officer, a representative of the general services contractor, was responsible for general maintenance and repair and for dealing with pavilion suppliers; the Protocol Officer and Protocol Assistant, provided by Berger & Associates Canada Inc., coordinated special events, handled publicity and media relations, prepared VIP schedules, met important visitors and, as required, gave special tours of the pavilion. In addition, security guards provided by Uniguard and cleaning staff from Scandinavian Building Maintenance worked in the pavilion around the clock.

A Drake supervisor was in the pavilion during open hours to ensure that the rotation of the guides through the 13 duty stations proceeded smoothly and to handle any scheduling or other problems that might occur during the day. In addition, the Drake supervisor constantly circulated through the building and was able to give guides regular feedback on their presentations, as well as to take appropriate corrective action, if the standards began to drop. The supervisor's presence in the pavilion helped to keep the guides' performances well-

focused, so that all visitors to the pavilion enjoyed highly professional and informative presentations. Drake also arranged various day trips to recreation spots in the Vancouver area and coordinated production of the pavilion's monthly newsletter. These activities undoubtedly contributed to the extremely high morale of the guide corps, as reflected in the low turnover rate during the six months of the fair. Only two guides resigned for personal reasons before Expo ended, and both were reluctant to leave.

The team approach to the pavilion's management helped meld the staff into a cohesive unit, with everyone working together to ensure that U.S. participation in Expo was successful. With the GSC concept, a class system could have developed in the pavilion, with USIA personnel on one side and employees of the firms involved in the service contract on the other. That such a situation didn't develop was due, at least in part, to the team approach.

The unique configuration of one large office, without any partitions, from which the pavilion operations were run also contributed to this. In the center of the office was a large conference table where staff and subcontractor discussions could be held; on one side of the room, centralized computer work stations were accessible to all staff. Around the room were several desks which were assigned by function rather than individual. The Duty Officer's desk was at one end of the



Guests at the official opening of the United States Pavilion were entertained by the U.S. Navy Band.





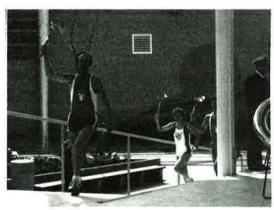
room and could be seen throughout the office area. Beside the Duty Officer's station was the Deputy Duty Officer's desk, while along a wall were the two protocol desks, as well as one desk each for the personnel, custodial and security staff. This arrangement permitted continuous and efficient communications on all operation matters, so that any staff member could receive immediate direction from the USIA Duty Officer.

Preview Week

Several preview events were held in the week before the opening of the fair. Serving as full dress rehearsals, these events were a good opportunity for guides and administrative staff to operate the pavilion without the added pressure of thousands of Expo visitors. This meant that any potential problems could be identified and corrected, so that a thoroughly professional product was presented to the public from the first day of the fair.

On April 26 and 27, the grounds and many of the pavilions were open for six hours for the friends and families of Expo workers. An estimated 20,000 people visited the grounds over that weekend, and several thousand of them visited the U.S. Pavilion. This helped the guides to get over their opening jitters. It was also the first opportunity to determine public reaction to the exhibit. Generally, that reaction was favorable.

On Tuesday, April 29, the United States
Pavilion was officially opened at a special ceremony in the
Courtyard of the States. Although most of the month of
April had been rainy and cold and it was raining on the
morning of the 29th, the clouds parted in the early
afternoon and the sun broke through, warming the



several hundred people who attended the opening. Commissioner General Fred Hartley presided over the ceremony, which was highlighted by the arrival of runners from Oregon and Washington. The group, participating in an event called the Freedom Run, ran from the California border to the Expo grounds carrying a message of

welcome from the President which officially opened the pavilion. A reception followed and the guests were invited to visit the pavilion. Guides not required for duty in the pavilion served as catering staff for the reception.

The pavilion was also open and staffed on the afternoons of April 30 and May 1, primarily for the benefit of the international media on hand to cover the opening of the fair. More than 2,000 media representatives were accredited for the opening, and about a quarter of them visited the U.S. Pavilion. In addition, some other pavilions had their official openings on the two media days and many of their guests took advantage of this opportunity to see the pavilion ahead of the crowds.



Public Access

Because of the flow-through nature of the pavilion, with the theater being an integral part of the exhibit, a pulse system to regulate public access was incorporated into the design. The time it took to show the film and re-fill the theater — about 10 minutes — governed the length of time between pulses. The guide at the entrance to the theater was equipped with a two-way radio and, when the theater doors were closed for another showing, would let the guide at the pavilion entrance know that another group of people could be let in.

But the pulse system did more for the pavilion's operations than simply regulate public access. It also meant that guides weren't performing the entire time they were on duty, as would have been the case in a free-flow pavilion. Instead, they were able to relax for a couple of minutes between pulses, so they were fresh to greet the next group of visitors. The fact that guides could enjoy this brief break was one of the major reasons their morale remained high throughout the fair.

Minor maintenance and repairs could be carried out on exhibits and equipment between pulses, so there was little down-time for any part of the exhibitry. As a



Ambassador Hartley presided over the opening ceremony.

Pavilion guides served as catering staff at a small reception in front of the pavilion following the official opening.

Waving Canadian and American flags, participants in the Freedom Run came onto the stage with a message of welcome from President Reagan. result, most visitors to the pavilion were able to enjoy the complete pavilion experience.

Occasionally, VIP groups required private tours of the pavilion, for security reasons, and this could be easily accomplished by holding back a pulse. Visitors waiting to get into the pavilion were used to groups of a couple of hundred people being let in on a regular basis and, in most cases, they didn't even notice that a pulse had been held back. As a result, there was little public perception of inconvenience when a private tour was required, as there would have been with a free-flow pavilion. With other groups of VIPs, it was a simple matter to place them at the start of a pulse, with or without a private guide, for a complete tour of the pavilion.

Originally, about 300 people were let into the pavilion every 10 minutes, but this number was soon found to be unwieldy and was reduced to 200. The problem was that 300 people took too long to get into the pavilion and, once inside, made the History Catwalk area uncomfortably crowded. As a result, the quality of guide presentations suffered. The smaller size seemed to result in a more fruitful experience for visitors. Although this move resulted in some reduction in the number of visitors to the pavilion, it appears to have had only a marginal impact on overall attendance. It produced a more even flow of visitors to the pavilion throughout the day. Many visitors, on seeing the longer lines at mid-day produced by the smaller pulse size, decided to visit the pavilion during the slacker early morning and late evening periods.

Because the pavilion offered what was

visitors was let in to the pavilion at 9:30 p.m. so that the pavilion operations could close down shortly after 10 p.m. Throughout the fair, the pavilion operated at about 98 percent capacity, with more than 2.5 million people visiting it between May 2 and October 13.

Lounge Operations

The Commissioner General's lounge in a national pavilion at an international exposition serves as the location for diplomatic and courtesy functions. The senior staff of the pavilion must have an area apart from the exhibits and the general public where, as representatives of the United States Government, they can receive visiting dignitaries.

The U.S. Pavilion lounge was located on the mezzanine level, behind the History Catwalk area. Two hostesses staffed the lounge during the day until 6 p.m., with one of them remaining on duty until 10 p.m. when the pavilion closed. The lounge was partially supplied by corporate donations and provided coffee, juice and a variety of other refreshments for VIP visitors. Several different donated mementoes were available for presentation to lounge guests: two different books on the space program, executive pen sets and lighters bearing the pavilion logo. Visitors were also given pavilion lapel pins, a world's fair tradition.

There were two major categories of VIP visitors. Easy access visitors, who were often corporate sponsors of other pavilions, were brought into the pavilion through the VIP entrance, bypassing the line-up in front. Lounge access visitors, comprising government leaders, diplomats and corporate sponsors of the U.S. Pavilion, met with senior pavilion staff in the lounge and







USIA Director Charles Z. Wick was escorted through the pavilion during his visit to the fair by Pavilion Director James Ogul.

The Prince and Princess of Wales were special visitors to the U.S. Pavilion during the first week of the fair.

Prince Charles and Lady Diana were escorted during their visit by Pavilion Director James Ogul, who here explains the construction of the Space Station to the royal couple.



often received an escorted tour of the pavilion. By the end of the fair, more than 4,200 parties totalling about 15,000 people had received special access to the U.S. Pavilion.

Protocol Officers also arranged for easy access to other pavilions for more than 200 parties, special guests of the U.S. Pavilion and of the U.S. Consulate in Vancouver. These special guests included American Ambassadors, Senators and Congressmen; mayors and city councillors from several major U.S. cities; commanding officers of all U.S. ships visiting Vancouver during the fair; and various other VIPs. Typically, a Protocol Officer or Assistant would develop a schedule of visits to the most popular pavilions for a guest and then would arrange special access at a specified time with the Protocol Officers for those pavilions. Since the fair was extremely well-attended, this service meant that such official visitors could gain access to major pavilions without lengthy waits in line.

Major Visits

During the first week of the fair, international media attention was focused on the U.S. Pavilion when the Prince and Princess of Wales visited. Prince Charles and Lady Diana officially opened EXPO 86 and, over the next few days, visited some of the major pavilions. The royal couple visited the pavilion on May 6, generating much excitement among the staff. The Prince and Princess of Wales were scheduled to spend only 15 minutes visiting the pavilion and were going to be shown just the diorama area. However, at the request of Prince Charles who expressed an interest in the space program, the royal couple toured the entire pavilion with Ambassador and Mrs. Hartley, escorted by Pavilion Director James Ogul. The visit was covered by representatives of the news media from around the world.

In early June, the pavilion once more attracted the attention of the international media when Vice-President George Bush spent a day at the Expo site. Mr. Bush, the most senior U.S. Government official to visit the fair, began the day with a tour of the United States Pavilion and the three state pavilions. Then, accompanied by Ambassador Hartley, the Vice-President visited the Canada and British Columbia Pavilions. Mr. Bush was also involved in several official functions during his one-day visit, including a formal luncheon sponsored by Expo organizers and the public signing of a trade agreement with representatives of the Canadian government in the Plaza of Nations on the Expo grounds.

Another highlight during the first few weeks of the fair was the visit of USIA Director Charles Z. Wick. In addition to the national and three state pavilions, Mr. Wick toured the British Columbia, Soviet, British and Chinese pavilions. He also met with British Columbia Premier Bill Bennett and Expo President Jimmy Pattison. After his tour of the site, Mr. Wick indicated his approval of the national pavilion and the U.S. participation in the fair.

Other important visitors to the U.S. Pavilion included Chrysler Chairman Lee Iacocca, General Motors Chairman Roger Smith, Twentieth Century Fox Chairman Barry Diller, movie stars Lillian Gish, Shirley Maclaine and Dennis Weaver, author William Manchester, astrophysicist Dr. Carl Sagan, philanthropist David Rockefeller, publisher Malcolm Forbes and representatives of the governments of many countries around the world.



Vice-President and Mrs. Bush, with Ambassador Hartley and some of the pavilion guides.



Lillian Gish prepares to sign the guest book in the Commissioner General's lounge at the U.S. Pavilion.

National Day Celebrations

An important part of a country's participation in any international exposition is the celebration of its national day, the day set aside by the exposition's organizers to focus attention on that particular country. It is an opportunity for most countries to expand the thematic exhibits in their pavilions with cultural events and visits of national dignitaries.

For many of the pavilion staff, particularly the guides, the most eagerly awaited day of the entire fair was July 4, the United States National Day at EXPO 86. Since most American eyes were on New York Harbor on Independence Day for the unveiling of the renovated Statue of Liberty, it was decided to make her the special guest of honor at the National Day celebrations.

The day's festive mood was immediately apparent to all Expo visitors who ventured near the U.S. Pavilion on July 4. Uniformed guides handed out balloons and miniature American flags to Expo visitors outside the pavilion, while the microphone-equipped guide on the outside skywalk regularly reminded passersby that this was the United States National Day and invited them inside. For the occasion, the exterior of the pavilion was draped with red, white and blue bunting. And, in the First Interstate Courtyard of the States beside the pavilion, continuous entertainment was provided throughout the day by the U.S. Navy and the U.S. Air Force Bands from Seattle, Washington, and by the Nicholson Pipes and Drums from Whittier, California.

The official ceremony, complete with speeches and entertainment, was held in the Xerox International Theater, a covered amphitheater with a seating capacity of about 2,500 people located only a short walk east of the pavilion. American flags waved from the flagpoles outside the theater; inside, bunting, floral arrangements and American flags adorned the stage. In addition, a large screen was suspended over the center of the stage and several big-screen television monitors were arranged on towers at the sides of the stage.

Entertaining the Expo crowds outside the Xerox Theater was the Spirit of America Band from Gray, Tennessee. By the time the ceremonies got underway at 11 a.m., the theater was filled with invited guests and Expo visitors, all waving miniature flags and enjoying the music of the Air Force Band and the Choral Ambassadors from Fort Lauderdale, Florida. Other entertainment included country singer Loretta Lynn, who sang the national anthem, and blues singer Salome Bey, who sang the Canadian anthem. Master of ceremonies for the event was U.S. Deputy Commissioner General for Public Affairs John Cannon and speakers included officials of the Canadian and British Columbian governments, representatives of the Expo Corporation, and Ambassador Hartley representing the United States. The highlight of the ceremony was a specially-videotaped message from President Reagan introducing the special guest of honor. Miss Liberty. The ceremony concluded with a video close-up of the Statue of Liberty, while the



Deputy Commissioner General Jack Cannon was the master of ceremonies for the event.

More than 2,500 people jammed into the Xerox Theater for the National Day Ceremony. On the left in the front row are Oregon Commissioner Robert Stevens and Washington Commissioner Sen. Barney Goltz.





The First Interstate Courtyard of the States was a busy place on July 4, with a variety of musical groups providing almost continuous entertainment throughout the day. Here, the Nicholoson Pipes and Drums from Whittier, California, perform.



Canadian Fisheries Minister Tom Siddon brought the greetings of the Canadian government to the National Day celebrations.



A jazz band from the U.S. Navy kept things swinging during the day.

Air Force Band and the Choral Ambassadors led the audience in a stirring rendition of "America, the Beautiful."

The pavilion was closed at 2 p.m., so that it could be set up for a major reception that evening — the culmination of the National Day celebrations. The 500 invited guests, who included government officials and the Commissioners General and their representatives from the other pavilions at Expo, all received a Liberty pin as a memento of that special day. (Liberty pins quickly became one of the Expo souvenirs most coveted by people working at the fair.) Food and refreshments were available throughout the pavilion, while a jazz ensemble from the Navy Band provided background music in the theater. Guides were on duty throughout the reception to answer guests' questions about the exhibits.

The event was acknowledged by Expo organizers to be a major success and, for many Expo participants, the American National Day Celebration was one of the fair's highlights.



A major reception for more than 500 guests was held in the pavilion, capping off the July 4 celebrations. Here, Bruce Howe, Commissioner General for the Canada Pavilion, enjoys the buffet.

Singer Salome Bey joined Loretta Lynn, the Choral Ambassadors and the U.S. Air Force Band in entertaining the several thousand people who attended the United States National Day celebrations at Expo.

U.S. Role in International Participant Affairs

U.S. Pavilion staff played an active role in representing international participants in dealings with Expo officials. Under the international treaty which governs world's fair participation by sovereign states, responsibility for such representation is vested in the College of Commissioners General of National Sections, the steering committee of the College and the chairman of the steering committee. At EXPO 86, the steering committee chairman was E.R.I. (Ted) Allen, O.B.E., Commissioner General of Section of the United Kingdom.

Drawing on his earlier experience at world's fairs, Mr. Allen proposed the creation of a new organization, one comprising Deputy Commissioners General and Pavilion Directors. It was responsibile for day-to-day relations with Canadian organizers, on behalf of all international participants. The group reported to the steering committee. U.S. Deputy Commissioner General Dale Morrison headed this group, known as the International Pavilion Directors' Working Group (IPDWG).

Under U.S. chairmanship, the IPDWG met weekly, or more often if required. In its work, it resolved numerous differences between Expo organizers and international participants. Its effectiveness in this area was widely acknowledged by both Expo officials and international participants and was duly noted in Mr. Allen's final report to the BIE on EXPO 86.

Disposition and Striking

Shortly after the fair started, plans for dismantling the United States Pavilion exhibit got underway. With a wide variety of items in the pavilion, ranging from dishwashers to the space station models, an efficient dismantling plan required an accurate inventory. In addition, the inventory included the furniture in the apartments provided to the guides and to the pavilion's senior staff. This task was assigned to one of the Deputy Duty Officers who designed a database on the pavilion's computer system for the inventory. This information could then be sorted in a

number of ways to produce a range of specific inventory information.

Immediately following the conclusion of the fair, the models used in the pavilion were taken down, disassembled, packed in crates and sent to their new homes. Most of the models were taken by the USIA for use in its international exhibition programs, although the space suit model used in the Manned Maneuvering Unit display went to the Power House Museum in Sydney, Australia. In addition, the Space Station model was shipped to the Space Hall of Fame in Alamagordo, New Mexico, which had paid for its construction, and the film was donated the Ontario Film Institute in Toronto.

Because of its comprehensive treatment of the space program, the Virginia Museum of Transportation in Roanoke was interested in acquiring the remaining uncommitted pavilion exhibitry. However, congressional prohibition on the domestic dissemination of USIA materials made it impossible to give the exhibits to domestic institutions, without special dispensation from Congress. The necessary legislation was passed in November and the displays were shipped to the museum to be re-assembled at no cost to the government.

Project officers for American participation at Expo 88 in Brisbane took the pavilion's audio-visual equipment and some office furniture for use in Australia. Remaining items were sold in Vancouver through a competitive bidding process. Most of the furniture for the guides' apartments and the remainder of the office furniture was disposed of in this way.

Dismantling of the pavilion exhibitry began on October 14, the day after the conclusion of the fair. Several guides were kept on staff to help in the removal and packing of all the items in the pavilion. In all, about 90 percent of the pavilion's contents were removed for future use by the Agency and other institutions — an unprecedented level of residual use. When the final demolition began on December 1, all that was left of the pavilion was its structure. The wrecking process was completed by December 19, under the direction of the General Services Contractor.

Section 6

The Impact of U.S. Participation

The United States participation in EXPO 86 had two major objectives:

- To make a positive contribution to the success of an event of substantial importance to Canada, a close trading partner and friend.
- To demonstrate American leadership in the exploration of space, for the benefit of mankind.

At a luncheon in honor of USIA Director Wick hosted by the Province of British Columbia, Premier Bennett indicated the importance of American participation when he said that "the key to the success of EXPO 86 was the participation of the United States. This couldn't be a world's fair without a United States presence." At the same time, the Premier described the U.S. Pavilion as "one of the most exciting" at Expo.

The results of a survey conducted by the Agency suggest that most of the more than 2.5 million people who visited the pavilion shared Premier Bennett's view. The pavilion received a favorable rating from 76 percent of the visitors, with 52 percent rating it good and another 24 percent saying it was excellent. This overall favorable rating was the highest received by any American pavilion at a world's fair since the USIA began

conducting such surveys at Expo 67 in Montreal.

To determine whether the pavilion's thematic goal had been achieved, visitors entering and leaving the pavilion were asked a series of questions relating to their view of the American space program. The survey results indicate that visitors had a significantly more positive view of the space program after going through the pavilion.

The high degree of visitor satisfaction with the pavilion is also suggested by the several hundred letters of congratulations and thanks received during the fair. All were appreciated by the pavilion staff, but probably the most satisfying letter was the one from Vice-President George Bush after his visit to the fair. In his letter, Mr. Bush offered his "sincere thanks on the work you have done for the U.S. National Pavilion at EXPO 86. It was, without a doubt, the high point of my visit to Vancouver and I return to Washington with the pride of your achievements in capturing the spirit of America's space program. You have done a tremendous job."

Comments from some of the other letters follow:

"It was. . . apparent that a reservoir of

creative energy was poured into your pavilion . . .



Special guest of honor for the United States National Day celebrations was the Statue of Liberty. Here, a group of pavilion guides poses with an ice sculpture of Miss Liberty.

Also quite noticeable in the workmanship was the overwhelming pride of hundreds who contributed to its planning and construction. . . . I am grateful for the opportunity to have experienced your pavilion." (U.S. Senator Mark Hatfield)

"Please accept our deepest appreciation for the quality of the exhibit and the expertise of the team of the U.S. National Pavilion." (J.R. Andre Bombardier, vice-president of Bombardier Inc.)

"We were most impressed by the imaginative space exhibits . . . as well as the AV presentations. The American participation at EXPO 86 will no doubt be a highlight of any visitor's day on the site." (Pierre MacDonald, Minister of Commerce, Quebec)

"The U.S. Pavilion was one of the highlights of our visit to Expo. I certainly appreciated the warm treatment we received. . .during our tour of the exhibits." (John Bosley, former Speaker, House of Commons, Canada)

"The U.S. Pavilion was wonderful. I was impressed by the well-designed exhibition of the U.S. manned space program." (Isao Uchida, Vice-Minister, Science and Technology Agency, Japan)

"The exhibits were excellent, and the

good crowds during our visit were being handled very conscientiously and efficiently." (Laurence William Lane Jr., U.S. Ambassador to Australia)

"I think the space exhibit at the U.S. Pavilion was oustanding. . . . Your exhibit clearly conveys where the future of the United States lies." (Gideon Schiller, pavilion visitor)

"The presentation of space exploration. . . only reinforced the sense of amazement and achievement I feel whenever I consider what men and women have done in this field. It was a memorable visit on what was a memorable day. (Jim Wallace, Member of Parliament, Great Britain)

"I would like to take this time to write to you and tell you how much I enjoyed the American pavilion at EXPO 86. . . . Thanks for making my visit to the fair a great one." (Michael Fialko, pavilion visitor)

By almost any measure, then, the American participation at the fair achieved its goals. Attendance throughout the fair was 98 percent of the pavilion's capacity, and visitor satisfaction was extremely high. For many visitors, the exhibition also demonstrated American pre-eminence in the exploration of space, and confirmed the nation's desire for international cooperation in space exploration and applications.

Section 7

Critique and Recommendations

No project of this magnitude is perfect. Some things should have been done differently. What follows is a critique of the Vancouver Expo project and staff recommendations for improving future Expo projects.

Scale of U.S. Participation

The level of participation appropriate for the United States depended, in part, on the perceptions of our Canadian host. However, at no time in the development phase of the Vancouver Expo project was there a clear relationship between the amount of the appropriation sought and the level of impact of the U.S. presence sought at the fair, based on a formal appraisal of Canadian expectations and the planned level of expenditure of other international participants.

Because the Vancouver Expo directly followed the Tsukuba Expo, most the Agency talent was devoted to implementing the Tsukuba design rather than developing the Vancouver concept. As a result, development of an EXPO 86 design concept was the part-time responsibility of the Director of Exhibits and an outside consultant. Due to this shortage of human resources, the crucially important process of early concept development suffered, because the wide range of interdisciplinary inputs essential to the formation of a comprehensive foundation were not available. Some important decisions, such as the size and location of the pavilion, the amount of the appropriated budget and the theme treatment, were made without the benefit of a clear definition of the overall context of the fair.

In its 1986 Report to the President, the U.S. Advisory Commission on Public Diplomacy recommended that an interagency study be undertaken to determine the political, commercial and public diplomacy value of U.S. participation in international expositions, their cost-effectiveness and the appropriate levels of U.S. government and private sector participation in them. This report strongly endorses this move as of essential importance to future U.S. participation in expositions.

Approach to Contracting

There are definite trade-offs between an umbrella general service contract, as at Vancouver, and a set of discrete

contracts for the same services. There is no single business which is capable of providing all of the services needed to do this kind of project. An umbrella contract then becomes essentially a series of sub-contracts which must be managed to the same degree as separate contracts. This was particularly noticeable in the areas of construction and guide recruitment. The general contractor had little experience in these areas and yet the USIA staff had to go through the GSC to make its wishes known. The GSC too often was an unnecessary middleman during critical phases of the project. In addition, the project paid the same amount of overhead costs with one general contractor as it would have with several contracts.

On the other hand, the general services approach had the advantage of simplifying administrative operations for the USIA. Under the Vancouver contract, the GSC was responsible for all sub-contracting, including preparation of contract packages, processing of change orders, final acceptance of sub-contracted work, and approval and payment of sub-contractor invoices. As a consequence, the USIA was presented with one invoice from the GSC and payment of sub-contractors was handled expeditiously.

Recommendations

- 1. The work of the interagency committee deserves full Agency support in developing an accepted rationale and defining the appropriate scope of U.S. participation in foreign world's fairs.
- 2. In developing future participation, the Agency should devote limited full-time personnel resources at least three years in advance of opening to the formulation of objectives and the creation of an agreed-upon design concept. This preliminary work should be done in-house, with outside expert resources drawn upon on a consultative basis.
- 3. As with concept development, long lead times should be allocated to developing design and general services contract specifications.
- 4. Funding for the developmental work indicated in recommendations above should come from general

Agency resources instead of earmarked Congressional appropriations. The magnitude of appropriations sought from Congress should be based directly on the results of this developmental work rather than on rough estimates made prior to the completion of conceptual development.

5. In order to assure orderly development of U.S. participation at foreign world's fairs, appropriated funding should be sufficient to cover all necessary costs. Private cooperation and funding for collateral programming should be vigorously pursued as an enhancement to fully funded participation.

Section 8

Appendices

Appendix A

Vancouver Expo 86 Budget											
Description	Ac	ctual F	Y 84	Act	tual FY 85	Act	tual FY 86	Actual	FY 87		TOTAL
DESIGN/DEVELOPMENT											
Design Contract		\$	0	\$	303,608	\$	25,950	\$13	36,159	\$	465,717
Art/Photo Services		•	,240	•	19	. *	6,827	4-1	0	*	8,086
Research			,255		0		15,000		0		19,255
A/V Contract			0		487,239		0		0		487,239
Misc. Costs			0		1,525		71		Ŏ		1,596
Other Contracts			0		269		81,128		0		81,397
Total		\$ 5	,495	\$		\$		\$13	36,159	\$1	,063,290
PRODUCTION		Ψ 0	,		,		-50,000	7-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, 555,255
Landscaping/Exterior Treatment		\$	0	\$	25,000	\$	42,100	\$	0	\$	67,100
Arch. Modifications		Ψ	0	Ψ	243,050	Ψ	654,919	Ψ	0	Ψ	897,969
Installation (Exhibit)			0		150,000		72,000		ő		222,000
Equipment Rental			0		28,513		5,082		0		33,595
Assembly/Striking			0		1,000		3,002	,	12,000		43,000
Fabrication			0		233,000		942,623		0	1	,175,623
Display Materials			0		13,250		20,050		0		33,300
Audio Visual Hardware			0		5,000		210,613		0		215,613
Equipment/Furniture Purchase			0		20,000		13,422		. 0		33,422
Other Contractor Travel			0		10,000		13,422		50		10,050
Mgt. Contract (Construction)			0				0		0		
Total		\$	0	e ·	283,434	e1	1,960,809	•	12,050	go.	283,434
		Ф	U	Φ.	1,012,247	\$1	1,900,009	. 4	2,000	фЭ	,015,106
OPERATIONS					0.400		0.000				
Guides Res. Rent/Utilities		\$	0	\$	2,182	\$	95,000	\$	0	\$	97,182
Pavilion Rent			0		0		568,000		0		568,000
Maintenance/Custodial			0		6,050		90,801		0		96,851
Insurance			0		10,000		2,771		0		12,771
Photo Services			0		1,000		3,000		0		4,000
Program Supplies			0		3,900		10,099		0		13,999
Pavilion Utilities			0		5,000		30,000		0		35,000
Other Contractor/VIP Travel			0		9,303		(697)		0		8,606
Mgt. Contract — Staff Service			0		339,290		22,457		3,200		374,947
Total		\$	0	\$	376,725	\$	821,431	\$ 1	3,200	\$1,	,211,356
LOGISTICS											
Shipping to Site		\$	0	\$	10,000	\$	1,078	\$	0	\$	11,078
Shipping from Site			0		1,000		4,849	2	5,000		30,849
Local Drayage			0		1,000		563		0		1,563
Rent Temp. Space (Storage)			0		1,000		5,252		0		6,252
Container Lease			0		1,000		0		0		1,000
Other Contractor Travel			0		2,000		0		0		2,000
Mgt. Contract			0		59,180		(5,805)		0		53,375
Total		\$	0	\$	75,180	\$	5,937	\$ 2	5,000	\$	106,117

Appendix A (Continued)

Vancouver Expo 86 Budget	••				
	A I DV 04	A . LEVOE	A . I DV oc	4 4 1000 000	TO TO A I
Description	Actual FY 84	Actual FY 85	Actual FY 86	Actual FY 87	TOTAL
ADMINISTRATION		J + 12 - 11 - 11			
Office Equip/Supplies	\$31,909	\$ 31,143	\$ 1,988	\$ 37	\$ 65,077
Furniture Purchase	0	20,643	20,050	0	40,693
Office Rental	0	8,900	4,714	0	13,614
Rent Residence (USIA)	0	14,050	55,500	0	69,550
Allowances	0	0	0	17,000	17,000
Utilities — Residential	0	2,000	5,000	0	7,000
Telephone	0	7,947	500	200	8,647
Toll Calls	0	4,018	17,010	0	21,028
Vehicle Maintenance	0	1,087	3,407	0	4,494
Domestic Misc. Shipping	211	9,985	26,928	60	37,184
Misc. Costs	0	261	- 1	0	262
Other Contractor Travel	0	5,000	. 0	0	5,000
Personnel (Salaries)	0	0	93,160	18,041	111,201
Mgt. Contract	0	322,940	0	48,580	371,520
Total	\$32,120	\$ 427,974	\$ 228,258	\$ 83,918	\$ 772,270
PARTICIPATION PROMOTION					*
Supplies	\$ 0	\$ 10,000	\$ 0	\$ 0	\$ 10,000
	φ 0		(42,000)	a 0	
Mgt. Contract	0	167,400			125,400
Misc. Shipping	0	2,000	0	0	2,000
Postage		2,000	0	0	2,000
Advertising/Promo. Serv.	0	5,000	0	0	5,000
Other Contractor Travel	0	5,000	0	0	5,000
Total	\$ 0	\$ 191,400	\$ (42,000)	\$ 0	\$ 149,400
PUBLIC AFFAIRS/PROTOCOL					
Supplies	\$ 0	\$ 5,000	\$ 31,491	\$ 0	\$ 36,491
Other Contractor Travel	0	5,000	0	0	5,000
Mgt. Contract	0	240,000	0	0	240,000
Misc. Shipping (DHL)	0	1,000	0	0	1,000
Postage	0	1,000	0	0	1,000
Promotionals	- 0	1,000	6.135	- 0	7,135
Total	\$ 0	\$ 253,000	\$ 37,626	\$ 0	\$ 290,626
TRAVEL				•	
Design Travel	\$ 0	\$ 34,578	\$ 1,935	\$ 0	\$ 36,513
Admin, Travel		·			
	4,063		13,873	5,176	41,559
Partic. Promo. Travel	2,155	6,277	10.000	0	8,432
Operations Travel	0.010	0	10,000	0	10,000
Total	\$ 6,218	\$ 59,302	\$ 25,808	\$ 5,176	\$ 96,504
PRINTING					
Admin. Printing	\$ 0	\$ 1,949	\$ 8,476	\$ 0	\$ 10,425
Promotion Printing	0	10,000	0	0	10,000
Public Afrs. Printing	0	2,000	0	25,000	27,000
Brochure Printing	0	1,000	31,257	0	32,257
Total	0	\$ 14,949	\$ 39,733	\$ 25,000	\$ 79,682
Grand Total	\$43,833	\$3,203,437	\$3,206,578	\$330,503	\$6,784,351

Appendix B

Corporate Sponsors

Burlington Industries	IBM	Nike, USA
Cinema-360, Inc.	Interconnect Equipment Systems	Rockwell International
Coachmen Industries, Inc.	Martin Marietta Corporation	Stoddart Publishing
A.T. Cross Company	McDonnell Douglas	Technikote Corporation
Du Pont	H.R. MacMillan Planetarium, Vancouver	United Airlines
General Motors of Canada	Motorola, Inc.	UNOCAL
Haida Trading Inc.	NASA	Zippo Manufacturing Co.

Appendix C

Pavilion Visitors

During the fair, more than 4,200 parties totalling about 15,000 people received special access to the pavilion. It wouldn't be possible to include them all, so the following list includes just some of these special visitors to the pavilion.

Admiral Stansfield Turner, former CIA director

Al Waxman, Entertainer

Alfonso Zebde, Senator, Mexico

Allen Hassenfeld, President, Hasbro

Alvano Obergon, Tourism Minister, Mexico

Ambassador Atmono Surjo, Indonesia

Ambassador Balerio Brigante-Colonna, Italy

Ambassador Bill Lane, United States

Ambassador Jacques Grootheart, Belgium

Ambassador K.C. Kim, Korea

Ambassador Sol Linowitz, United States

Ambassador Vladimir Pavicevic, Yugoslavia

Ambassador Zhan Yu, China

Amy Grant, Gospel Singer

Angier Biddle Duke, Former envoy to Morocco & Spain, United States

Archbishop Beatitude Theodosius, Primate of Russian Orthodox Church

Arthur O'Connor, President, G.D. Searle & Co.

Asad Khan, Senator, Pakistan

Barry Diller, Chairman, 20th Century Fox

Benoit Bouchard, Secretary of State, Canada

Bernard Valcourt, Minister of State for Small Business, Canada

Bjarne Trygvasson, Canadian astronaut

Bobby Vee, Entertainer

Bud Wilman, Chairman, Molson's Brewery

Burl Ives, Entertainer

C.G. Kim, Transportation Minister, Korea

C.H. Wong, Chairman, Hong Kong Securities Commission

Carlos Vidali, International Affairs Director, Mexico

Claudio Signorelli, Transportation Minister, Italy

Col. A.T Ayuba, Communications Minister, Nigeria

Conrad Black, Canadian financier

Congressman Bob Wise, United States

Congressman James Courter, United States

Congressman James Scheuer, United States

Congressman Joel Broyhill, United States

D.E. Peterson, Chairman and Chief Executive Officer, Ford Motor Company

Dame Janet Baker, Entertainer

Dante Santos, President, Philippines Airlines

Datuk Khoo Kay Peng, Chairman, Malaysian Tourist Development Corporation

David Cosgrove, President, Upjohn Pharmaceuticals

David Rockefeller, Banker

Donald "Deke" Slayton, American astronaut

Dennis Weaver, Entertainer

Dick Nunis, President, Walt Disney Company

Dr. Carl Sagan, Astrophysicist

Dr. Werner Erhardt, Founder, EST

Dr. Yeo Ng Hong, Communications Minister, Singapore

E. Klein, Chairman, U.S. Toy Company

Edward Lakusta, President, PetroCanada

Everly Brothers, Entertainers

Frank Dumont, Chief Executive Officer, Resorts International

Gene Cowan, Vice-president, ABC News

George Bush, Vice-president, United States

Gerry Seligman, Director, UNICEF

Gilbert Grosvenor, Chairman, National Geographic Society

Governor Bill Sheffield, Alaska

Governor George Deukmeijan, California

Governor Richard Lamm, Colorado

H.S. Kim, Chief Executive Officer, Samurai Group, Korea

Hans de Koiver, Chairman, Royal Dutch Paper Mills

Harvey Andre, Defence Minister, Canada

Henry Mancini, Entertainer

Huang Quing Qu, Vice-Governor, Guangdong Province, China

Huang Yanzhao, Consul General, China

J.B. Reid, Chairman, Qantas

Jacques Sol-Rollands, President, Bureau International des Expositions

James Irwin, American astronaut

Jim Wallace, MP, United Kingdom

Joe Clark, External Affairs Minister, Canada

Joel Reitman, President, Reitman's

John Addison, Chairman, Crown Life

John Turner, Opposition Leader, Canada

Jose Murgia, Transport Minister, Peru

K.N. Kol, MP, Korea

James Reichart, Chief Executive Officer, Brunswick Corporation

Kathryn Sullivan, American astronaut

Kenny Loggins, Entertainer

Kim Jin Hon, Trade Minister, Korea

Kirk Lanterman, President, Holland America Cruise Lines

L. Stanley Crane, Chairman, ConRail

L.C. Sandford, Deputy Prime Minister, Barbados

Lady Noon, Minister of State, Pakistan

Larry Mann, Entertainer

Senator Frank Murkowski, Alaska

Lawrence Weinberg, Owner, Portland Trail Blazers

Lee Iacocca, Chairman and Chief Executive Officer, Chrysler

Leo Odero, Chairman, Kenvan Airways

Leonard Goldberg, President, Paramount Pictures

Leonard Lauder, President, Estee-Lauder

Lillian Gish, Entertainer

Lord Gray, Minister of State, Great Britain

Lord Margrave, Great Britain

Lord Plummer, Great Britain

Lou Rawls, Entertainer

Lubomir Strougal, Prime Minister, Czechoslovakia

M. A. Allawala, Minister of State, Pakistan

Malcolm Forbes, Publisher

Marc Garneau, Canadian astronaut

Melvin Lane, Publisher

Michael Wilson, Finance Minister, Canada

Niccoli Filipovic, Vice-President, Federal Assembly, Yugoslavia

Nicholas Kouandi Angba, Trade Minister, Cote d'Ivoire

Northrup Knox, Owner, Buffalo Sabres

Norton Clapp, Chairman, Weyerhauser

Pat Carney, International Trade Minister, Canada

Paul Desmarais, President and CEO, Power Corporation

Paul Robert, Chief Executive Officer, Wrigley

Peter Bronfman, President, Brascan

Peter Neress, Foreign Trade Minister, Hungary

Peter Thomas, Chief Executive Officer, Century 21

Piers Jacob, Financial Secretary, Hong Kong

Pratiwi Sudarmono, Indonesian astronaut

Prince Charles and Lady Diana, Prince and Princess of Wales

Prince Faisal bin Sattam. Saudi Arabia

Prince Faisal bin Mishaal bin Saud, Saudi Arabia

Prince Mohiyuddin Baluch, Commerce Minister, Pakistan

Prince Sultan bin Salom, Saudi Arabian astronaut

R. Tizard, Energy Minister, New Zealand

Raymond Burr, Entertainer

Rene Monory, Education Minister, France

Richard Hatfield, Premier of New Brunswick, Canada

Robert Mondavi, Owner, Mondavi Wines

Robert Bourassa, Premier of Quebec, Canada

Robert Campeau, Chairman, Campeau Corp.

Robert Thirsk, Canadian astronaut

Roger Smith, Chairman, General Motors

Rupert Murdoch, Owner, The London Times

Rusmin Nurvadin, Transportation Minister, Indonesia

Ryutano Hashimoto, Transport Minister, Japan

S. Mac Irwin, President, Irwin Toys

S. Yanai, Vice-minister, Foreign Affairs, Japan

Santos Martins, Trade and Commerce Minister, Portugal

Seymour Topping, Editor-In-Chief, New York Times

Sheik Hussein Al-Mansuri, Communications Minister, Saudi Arabia

Shigeaki Hagama, President, Fuji-TV, Japan

Shirley Maclaine, Entertainer

Sir Michael Armitage, Chief of Defence Intelligence,

Great Britain

Sir William Allen, retired Chairman, Qantas

Stanley Blank, President, Parade Publications

Steven Vehslage, President, IBM, New York

Stewart Buchalter, Chairman, Standard Brands

Stewart Roosa, American astronaut

Suzanna Agnelli, Vice Mininster of Foreign Affairs, Italy

T. Murphy, President, ARCO

Thomas Sommeirer, President, Jergens

Trevor Eyton, President, Brascan

V. Shamshin, Communications Minister, USSR

Valentin Simonenko, Chairman, Odessa City Soviet, USSR

W.S. Cook, Chairman, Union Pacific Corporation

William Manchester, Author

Appendix D

Pavilion Staff

Commissioner General

Fred L. Hartley

Deputy Commissioners General

Dale Morrison (Project Director)
Jack Cannon (Public Affairs)

Duty Officers

Anita Grinvalds (Deputy Project Director)

Katy Kalb (Executive Officer) Jim Ogul (Pavilion Director)

Deputy Duty Officers

Bill Kristofferson

Ken Pepin Herman Quon

Ray Patterson

Public Affairs and Protocol Staff

Rick Hyde Alison Jones John Keirstead Marlene LaVoie David Lesjak Kelly Taugher

Pavilion Secretary

Karen Kilback

Annika Treffner

Guides

Shawna Ackerman Mitzi Austin Mary-Jo Baniecki Simone Benoit Kellie Boyes Mike Buller Catherine Dixon Alisa Ford Randy Ford Robert Gray Nancy Grell Chuck Hester Laura Jansen Andrew Jay Karyn Kaplan

Carie Kazmierczak Jenny Knudson Wayne Larson Kimberli Lile

Frank Martin Marianne Manville

Ellen McCoy
Robb Miller

Elizabeth Platt Karen Puckett

James Ratcliffe Michael Robinson

Timothy Robinson Meredith Scantlen

Margaret Shaw Darryl Simmons

Brad Snelling Katia Spielberg

Todd Tanguay Elizabeth Tudor

Tracy Van Horn

Guide Supervisors

Brenda Burch Marion Campbell John Kapusty Timm Williams

Lounge Staff Billie Milford

Susan Moore Annie Ernst-Taillefer **Projectionists**

John Bennest Dave Fairleigh Derek Jones

Cleaning Staff

Iva Bandic
Jorge Batista
Steve Eely
Keith Eely
Nancy Holt
Ethel Hussein
Elizabeth Kahle
Kal Rasmussen
Luis Sousa

Amelia Stamankovic Thom Williams

Security Guards

Pat Ailles
Raul Allueva
Terry Brown
Russell Collins
Sewa Gill
John Goldie
Juan Ledo
Mas Mineta
Walter Paquette
Jose Payawal
Bill Rana
Shivtej Randhawa
Dave Raymond

Frank Wells

Dennis Williams

Appendix E

U.S. Participants in Vancouver Expo 86 Specialized Periods

SEARCH AND RESCUE — May 12-18, 1986

NASA

SARSAT Aerovan

U.S. Coast Guard

U.S. Coast Guard Cutter Morgenthau

HH-52 Rescue Helicopter

U.S. Coast Guard Cutter Point Bennett

Rigid Hull Inflatable Craft Search and Rescue Team

Demonstrations

AMVER — Automated Mutual Assistance Vessel

Rescue System

USCG Multi-Mission Photo Display

AIREYE Console (Computerized sensor suite for

aircraft)

STEAM EXPO - May 23-June 1, 1986

City of Portland, Oregon

Southern Pacific #4449

Western Forest Industries Museum, Tacoma, WA

Kinzua Pine Mills #91

California State Railroad Museum, Sacramento, CA

Union Pacific #4466

Nevada State Railroad Museum, Carson City, NE

Virginia and Truckee #22 "Inyo"

Northern Counties Logging Interpretive Association,

Eureka, CA

The "Gypsy"

Union Pacific Railroad, Omaha, Nebraska

Union Pacific #8444

Norfolk Southern Corporation, Roanoke, West Virginia

Best Friend of Charleston

Pacific Locomotive Association, San Leandro, California

Pickering Lumber Corporation #12

Quincy RR #2

TRUCKS AND INTERCITY BUSES — June 9-15, 1986

Greyhound Lines, Inc.

Vintage Bus Display

URBAN TRANSIT — June 16-30, 1986

Neoplan USA

Articulated Bus

Mining and Urban Transit Systems Corp.

Inductive Control System

Knolle Magnetrans

MAGLEV transit system prototype

Gillig Company

Leland Olympian Bus

Mack Bus and Coach Group

International Highway Transportation Exhibition

AUTOMOBILES - July 20-25, 1986

Clenet Coachworks

Handbuilt Cars

Vector Cars

Vector WII

ASC, Inc.

Vision Automobile

Innovative Vehicle Design Competition Participants:

California State University, Fresno

Mankato State University

Western Washington University

COMMUNICATIONS AND MOBILITY FOR THE

ELDERLY AND HANDICAPPED — July 20-25, 1986

EVAC + CHAIR Corporation

EVAC + CHAIR

Johnson Engineering Corp.

Unistick

Love Corporation

Talking Signs

MARINE COMMERCE - July 21-August 2, 1986

U.S. Coast Guard

U.S.C.G. Boutwell

U.S. Navv

Military Sealift Command Vessels Display

AVIATION — August 1-10, 1986

(Including the Abbotsford International Air Show)

Boeing Corporation

McDonnell Douglas Corporation

Lockheed Corporation

Hughes Aircraft

Heritage Aviation Art

World Aviation

Huck Aviation

Columbia Helicopters

Cascade Sales

King Engineering

Harris Corporation

Huck Manufacturing Corporation

Evergreen International

Airline Pilots Association

U.S. Navy Blue Angels

U.S. Army Golden Knights

NASA Aerovan

NASA QSRA Research Aircraft Federal Aviation Administration Goodyear Blimp Coor's "One-Man Jet" Federal Express

ALTERNATIVE FUEL AND POWER SYSTEMS FOR TRANSPORTATION — August 8-17, 1986

TSAR Phoenix Solar-Powered Vehicle The University of Illinois Soft Transportation System

TRANSPORTATION FOR RECREATION —

August 18-24, 1986
Coachmen Industries, Inc.
Luxury Recreation Vehicle
Zimmer Motor Coach
Luxury Recreation Vehicle

Wetco Industries
WetBike
R & E Cycles
Custom-Made Tandem Bicycles
Bell Equipment Co.
Bicycle Safety Equipment

 ${\bf HUMAN\text{-}POWERED\ TRANSPORTATION} -$

August 25-31, 1986

International Human-Powered Vehicle Association
Seattle to Vancouver Bike Race

MODERN RAIL — September 29-October 5, 1986 The Paton Corporation Freight Cars Rockwell International Advanced Railroad Electronics System

Appendix F

Major Suppliers and Contractors

A & A Plumbing & Heating

AllMar Distributors Ltd.

Argos Products Ltd.

Berger & Associates Canada Inc.

Boston Light & Sound

Britco Leasing Limited

Checkmate Drycleaning

Christopher Chapman Ltd.

Coit Drapery and Carpet Cleaners

Daniel J. Edelman Inc.

Davidson & Sons Customs Brokers

Davson, Prichard & Downward Ltd.

Division Ten Enterprises

Drake International Inc.

Dynaction Sign & Display Systems Ltd.

Eccom Developments

Empire Stevedoring Co. Ltd.

Federal Express

Gallagher Bros. Contractors Ltd.

Granada TV Rental Ltd.

Gray Beverage Co. Ltd.

Holland Landscapers Ltd.

Houle Electric Ltd.

Imageset Constructions Inc.

Jack Cewe Ltd.

Johnston Floor Co. Ltd.

MG Builders Ltd.

MacDonald Realty

McConnell Air Conditioning & Refrigeration Services

B.C. Ltd.

Montgomery Kone Elevator Co. Ltd.

Neptune Food Suppliers Ltd.

Toshihiko Sakow Associates Inc.

Panorama Building Systems

Phillips Barratt Engineers & Architects

Pioneer Disposal Services

Precision Locksmithing

Purves Ritchie Rentals

Rancho Realty Ltd.

Rathe Productions B.C. Ltd.

Reed Stenhouse Associates Ltd.

S.W. Fleming Ltd.

Samco Metal Products Ltd.

Scandinavian Building Maintenance Ltd.

Selby Property Investments Ltd.

Seymour Painting Ltd.

Shanahan's Ltd.

Signal Trucking Ltd.

Sony of Canada Ltd.

Superior Repro

The T. Eaton Co. Ltd.

Thorne Riddell

Uniquard Security

United Scale Model

Warner Shelter Corp.

Williams & Mackie Ltd.

XL Ironworks

